

**WHAT IS CLAIMED IS:**

1. A detachable keypad comprising:  
 an earphone-microphone jack;  
 5 a key array; and  
 a DTMF (Dual Tone Multi-Frequency) generator,  
 wherein when a key is pressed while an earphone plug is inserted into the  
 earphone-microphone jack, a DTMF signal is generated by the DTMF generator  
 corresponding to the pressed key and is transmitted to a microphone of a mobile  
 10 phone through an earphone-microphone speaker.
2. A mobile phone comprising:  
 a microphone;  
 an earphone-microphone speaker fixing portion for fixing an earphone-  
 15 microphone speaker at a position enabling the microphone to receive sound from  
 the earphone-microphone speaker;  
 an audio/DTMF (Dual Tone Multi-Frequency) separator for separating a  
 signal received at the microphone into an audio signal and a DTMF signal; and  
 a controller for analyzing the DTMF signal and performing an  
 20 operation according to the analyzed DTMF signal.
3. The mobile phone of claim 2, further comprising a display,  
 wherein the controller analyzes the DTMF signal and if the DTMF signal  
 represents a digit or a character, the controller controls the display to display the  
 25 digit or character.
4. The mobile phone of claim 2, wherein the earphone-microphone  
 speaker fixing portion is a magnet.
5. A detachable keypad comprising:

- an earphone-microphone jack;
- an earphone-microphone sensor for checking whether an earphone-microphone plug is inserted into the earphone-microphone jack;
- a key array;
- 5 a key press sensor for sensing the pressing of each key of the key array;
- a DTMF (Dual Tone Multi-Frequency) generator for generating a DTMF signal; and
- a controller for controlling the DTMF generator to generate a DTMF signal corresponding to a pressed key if pressing of the key is sensed while the
- 10 earphone-microphone plug is inserted into the earphone-microphone jack and transmitting the DTMF signal to an earphone-microphone speaker through the earphone-microphone jack and plug.
6. The detachable keypad of claim 5, further comprising:
- 15 a key volume control signal generator for generating a key volume control signal if the key press sensor senses input of a key volume control key; and
- an amplifier for amplifying the DTMF signal received from the DTMF generator by a predetermined level in response to the key volume control signal.
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7. A mobile phone with a detachable keypad comprising:
- a microphone;
- an earphone-microphone speaker fixing portion for fixing an earphone-microphone speaker at a position enabling the microphone to receive sound from
- 25 the earphone-microphone speaker;
- an audio/DTMF (Dual Tone Multi-Frequency) separator for separating a signal received at the microphone into an audio signal and a DTMF signal; and
- a controller for analyzing the DTMF signal and performing an operation according to the analyzed DTMF signal;
- 30 wherein the detachable keypad comprises an earphone-microphone jack,

a key array, and a DTMF (Dual Tone Multi-Frequency) generator, wherein when a key is pressed while an earphone plug is inserted into the earphone-microphone jack, a DTMF signal is generated by the DTMF generator corresponding to the pressed key and is transmitted to the microphone of a mobile phone through the  
5 earphone-microphone speaker